Let us see how he heals them. ' Every cloud is primarily definable—' visible vapour of water, floating at a certain height in the air.' " It is thus distinguished from that "form of watery vapour" which "exists just as widely and generally at the bottom of the air as the clouds do on what for convenience' sake we may call the top of it." Mr. Ruskin hopelessly confuses vapour with water-dust, and this confusion leads him into some amusing difficulties. He asks whether it is "with cloud vapour as with most other things, that are seen when they are there, and not seen when they are not there, or has cloud vapour so much of the ghost in it that it can be visible or invisible as it likes, and might, perhaps, be all unpleasantly and malignantly there just as much when they did not see it as when they did?" To this he answers "comfortably and generally" that "on the whole a cloud is where we see it, and not where we do not see it," and that we must not allow the scientific people to tell us that rain is everywhere, but palpable in one place, impalpable in another. He presently returns to his point. He has defined a floating or sky cloud, and defined the falling or earth cloud (which by the way had been altogether excluded by his first definition from his category of clouds). "But there is a sort of thing between the two which needs another sort of definition, namely, mist." The definition of this intermediate substance, however, Mr. Ruskin does not supply, being content with asking what difference there is between clear and muddy vapour. This division of clouds has at least the merit of brevity, although it is subsequently complicated by a further division into "two sorts of clouds, one either stationary or slow in motion, reflecting unresolved light, the other fast-flying and transmitting resolved light. [Really, clouds at a distance and clouds overhead.] As regards the difference in the nature of these, Mr. Ruskin merely "hints to us his suspicion that the prismatic cloud is of finely comminuted water or ice, instead of aqueous vapour";—it is difficult to understand what he supposes the former kind of cloud to be composed of.

During the forty years previous to 1871, according to the certificate of Mr. Ruskin, the clouds, thus divided and cross-divided, appear to have behaved themselves in a peaceable and orderly manner. Even the "thunder-cumulus" (English-Latin, by the way) did "its mighty work in its own hour and in its own dominions, not snatching from you for an instant or defiling with a stain the abiding blue of the transcendent sky, or the fretted silver of its passionless clouds." We may remark that these "good, old-fashioned, healthy storms" frequently had rather extensive dominions: *e.g.* on August 13, 1857, one of these storms was simultaneously felt over many thousand square miles, and extended from the Land's End to John o' Groat's, besides covering a very extensive district on the north-western parts of the European continent. The deportment of the great bogy meteor, "storm-cloud or more accurately plague-cloud," of the nineteenth century is exceedingly different. From one part of Mr. Ruskin's description of this phenomenon we imagined that he might allude to the sheet of stratus commonly occurring in winter anti-cyclones, a sheet which occasionally covers upwards of 60,000 square miles, with scarcely a rift in its surface, the greatest vertical thickness of the cloud being only 300 or 400 feet. But this illusion was soon dispelled. For we find that "in the plague-wind the sun is choked out of the whole of heaven all day long by a cloud which might be a thousand miles square and five miles deep." One would scarcely have expected so dense a cloud mass merely to turn the sun red, but Mr. Ruskin is angry with it for not doing so: "That thin, scraggy, filthy, mangey, miserable cloud, for all the depth of it, could not turn the sun red as a good business-like fog did with a hundred feet or so of itself." Further, it is accompanied by a terrible wind by which "every breath of air is polluted half round the world" [*sic*]. Mr. Ruskin omitted to mention the effects of this plague-wind on agricultural or vital statistics. "It is a wind of darkness," also "a malignant wind." Further, "it always blows tremulously, making the leaves of the trees shudder as if they were all aspens but with a peculiar fitfulness which gives them an expression of anger as well as of fear and distress." Further, "it pollutes as well as intensifies the violence of all natural and necessary storms." Here again some explanation is sorely needed, since we should much like to know whether during the plague-wind barometric gradients become steeper, or whether the force of the wind in relation to the gradient is greater than usual.

Enough for the present of such bogies; although we fear that we have by no means done with them until our literary men will master the simplest elementary primers. But not enough of Mr. Ruskin, whom we could ill spare. His English is often delicious; always in his most dyspeptic diatribes amusing. And we can all appreciate his concluding advice that we should "bring back our own cheerfulness and our own honesty; and cease from the troubling of our own passions," and (not least we think of all) "the insolence of our own lips." A good recipe: add a dash of humility and of respect for the opinions of wiser men;—and all may yet be well, even though our return to the paths of rectitude should fail to dissolve the "mangey" clouds, and quench the fevered wind of a storm-harried and woe-worn era.

W. CLEMENT LEY

SPINOZA

Ethic. By Benedict de Spinoza. Translated from the Latin by William Hale White. (London: Trübner and Co., 1883.)

IF proof were requisite that the standard of value in philosophy is different from that which obtains in the estimation of scientific research, it would only be necessary to point to the case of Spinoza. There is probably no thinker of the nature of whose work there obtain conceptions more hopelessly irreconcilable; there is certainly none about whose position there is more general unanimity. To refer to the more recent of his English critics, Prof. Caird and Mr. Frederick Pollock are at one in assigning to Spinoza most important functions in the development of philosophical inquiry. Yet there is scarcely a single point in his system as to which their respective interpretations are not mutually exclusive. But as regards the broad feature which makes Spinozism deeply interesting to students of science in the strict sense there can be no doubt. The application of the method of geometry to philosophical problems finds its counterpart in the prevailing, and apparently by no means diminishing, disposi-

© 1884 Nature Publishing Group

tion to bring certain questions of metaphysics within the scope of scientific inquiry. That any one should have rejected the current method of metaphysics in favour of a geometrical investigation into the nature of God and existence, cannot be otherwise than significant to persons who seek to determine the psychological problem of the nature of consciousness by physiological means. Hence it is that there are some students who think that, if any philosophy were possible, it were that of Spinoza, and others who say that in the work of Mr. Spencer and Prof. Clifford they find the inheritance which Spinoza left behind him.

Mr. Hale White has done his difficult work well. The translation is executed with great care, and the style of the original has been reproduced with some success. That English readers of Spinoza have entertained very loose notions of his real teaching has been due in no small measure to the very inaccurate translation which has hitherto passed current. The present volume should do much to improve the popular conception of Spinoza's system.

At the risk of repetition of what has already been insisted on in these columns, it is right to contrast the position of the naturalists who accept Spinoza's application of scientific methods to metaphysical questions, with the procedure of Kant and those who are currently described as Neo-Kantians. It is the more desirable to revert to this topic because, although there is much complaint that the Neo-Kantians do little (if anything) more than repeat Kant's criticism of the naturalist (or, as he would have described it, dogmatic) doctrine, there is but little evidence that this criticism has been considered, much less met. People go on reasoning upon the old lines about the relation of mind to body and of God to the world as if Kant (to borrow a phrase from another branch of learning) had never obtained a rule calling upon them to show cause why there should not be a new trial of all such questions. It cannot be sufficiently borne in mind that at the present time there are only two courses open in this reference to conscientious thinkers. Either they must abstain altogether from the discussion of an increasing number of problems which are suggested by scientific inquiry, or they must be at the pains, however irksome, to master the nature of the sceptical doubts which Kant brought to bear upon the possibility of these problems. And it may be added that to single them out for elimination is not so easy a task as might be supposed. Probably the real reason why the study of Spinoza's ethics is attended with so much difficulty is that the extraordinary instinct which guides men of the highest genius in inquiries in new and unknown regions raised doubts in his mind which the investigations of Kant subsequently exhibited as the consequences of a more profoundly sceptical point of view. That difficulties arise when men reflect upon the nature of God was for Spinoza, as for Kant, due to the impossibility of reasoning on such matters as if they were ordinary facts of experience. In Spinozism the geometrical method culminated in the abrupt cessation of thought of this kind, just as in Hume empiricism ended in the paralysis of speculation. Had Spinoza pressed his distinction between different kinds of knowledge further, his system must have become in a greater or less degree sceptical in its tendencies—sceptical in the sense in which Kant was sceptical as a preliminary to reconstruction, or in which, to take the case of a very recent scientific writer, the late Prof. Clifford was a sceptic when he completed his analysis of experience with his theory of ejects. The difference between the three cases is that Kant clearly saw the origin and nature of the difficulties raised by himself, and made the inquiry the preliminary to a radically different discussion of the issues raised in philosophy and science alike. It were well if the fact were less left out of account that the rule obtained by Kant for a new trial of these issues has never yet been discharged.

R. B. HALDANE

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

The Krakatoa Eruption

THE Council of the Royal Society has appointed a Committee for the purpose of collecting the various accounts of the volcanic eruption at Krakatoa, and attendant phenomena in such form as shall best provide for their preservation and promote their usefulness.

The Committee invite the communication of authenticated facts respecting the fall of pumice and of dust, the position and extent of floating pumice, the date of exceptional quantities of pumice reaching various shores, observations of unusual disturbances of barometric pressure and of sea-level, the presence of sulphurous vapours, the distances at which the explosions were heard, and exceptional effects of light and colour in the atmosphere.

The Committee will be glad to receive also copies of published papers, articles, and letters bearing upon the subject.

Correspondents are requested to be very particular in giving the date, exact time (stating whether Greenwich or local), and position whence all recorded facts were observed. The greatest practicable precision in all these respects is essential.

All communications are to be addressed to

G. J. SYMONS,
Chairman Krakatoa Committee

Royal Society, Burlington House, W., February 12

The Remarkable Sunsets

THE following facts in reference to the unusual sunsets, as witnessed in the United States, will I hope be of sufficient value to your readers to justify an insertion in the pages of NATURE.

The place from which I write is 1063 feet above sea-level, 40° 48′ 47″ N. lat. and 81° 53′ 37″ W. long. from Greenwich. The main features of the exhibition here have been the crimson glow—the first and after-glow, with other accompanying colours, closely corresponding with those in England and Europe. Hence I need not occupy your pages with a special description.

I have on record seven cases, nearly all the weather would permit one to see. These occurred on November 27, December 9, 10, 25, and 28, and on January 13 and 17.

The first and second glow have extended in two or three instances, though faintly, to the zenith, and the first has occasionally been reflected on the eastern sky. On December 28, the most brilliant exhibition in the series, an arch was formed in the east, the colours red and yellowish green, very soft, and much blended. The crimson glow on the sky flooded the western sides of buildings with an unearthly light, and cast faint shadows across the snow. The appearance of the after-glow, when the sun had reached a certain angle in its decline, favours the view that it is a reflection of the first. If this be true, it is not neces-

© 1884 Nature Publishing Group